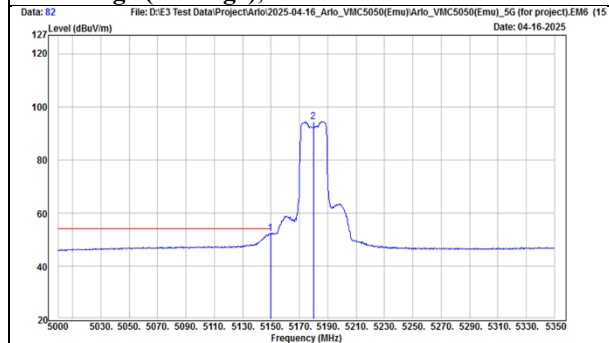


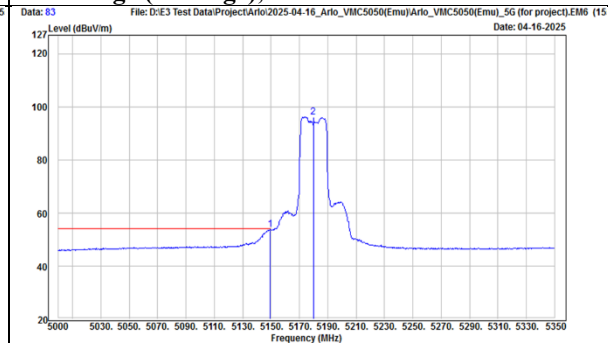
Mode	802.11n(HT20)	Channel	36
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5149.1	46.84	19.76	66.6	74	-7.4	PK
		5149.8	32.45	19.76	52.21	54	-1.79	AVG
	@	5180	87	19.67	106.67	N/A	N/A	PK
	@	5180	74.8	19.67	94.47	N/A	N/A	AVG
Vertical		5146.3	50.11	19.75	69.86	74	-4.14	PK
		5149.45	34.01	19.76	53.77	54	-0.23	AVG
	@	5180	88.45	19.67	108.12	N/A	N/A	PK
	@	5180	76.58	19.67	96.25	N/A	N/A	AVG

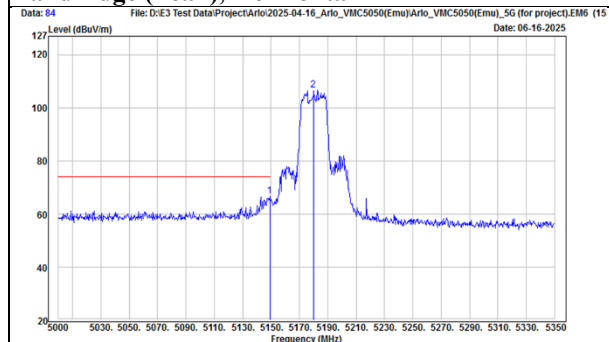
TX, 802.11n(HT20) (Ch 36)
Band Edge (Average), Horizontal



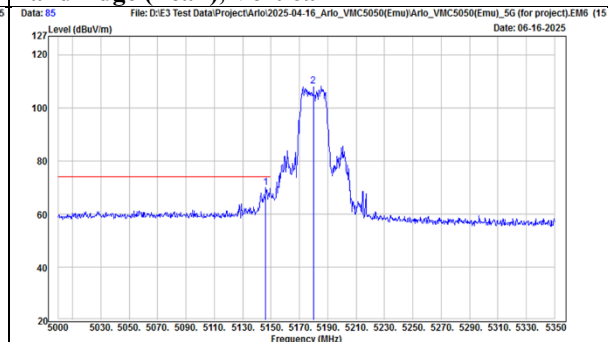
TX, 802.11n(HT20) (Ch 36)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 36)
Band Edge (Peak), Horizontal



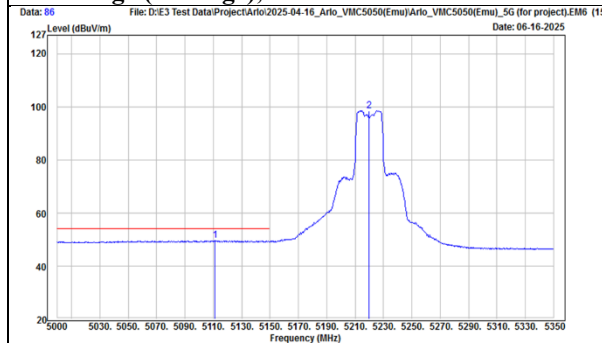
TX, 802.11n(HT20) (Ch 36)
Band Edge (Peak), Vertical



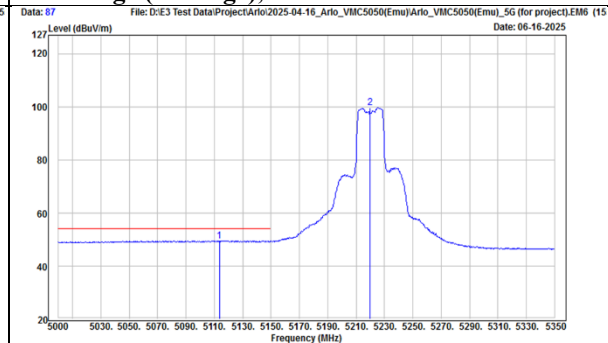
Mode	802.11n(HT20)	Channel	44
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5111.3	29.89	19.68	49.57	54	-4.43	AVG
		5114.8	41.95	19.69	61.64	74	-12.36	PK
	@	5220	87.74	19.48	107.22	N/A	N/A	PK
	@	5220	79.1	19.48	98.58	N/A	N/A	AVG
Vertical		5022.75	42.15	19.25	61.4	74	-12.6	PK
		5113.75	29.8	19.68	49.48	54	-4.52	AVG
	@	5220	88.37	19.48	107.85	N/A	N/A	PK
	@	5220	80.27	19.48	99.75	N/A	N/A	AVG

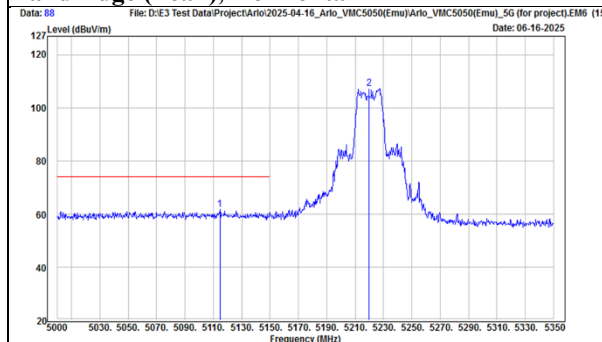
TX, 802.11n(HT20) (Ch 44)
Band Edge (Average), Horizontal



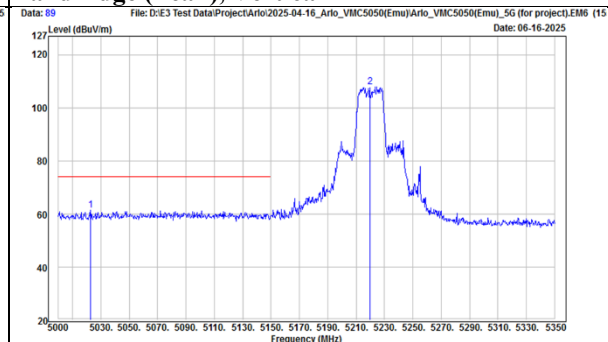
TX, 802.11n(HT20) (Ch 44)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 44)
Band Edge (Peak), Horizontal



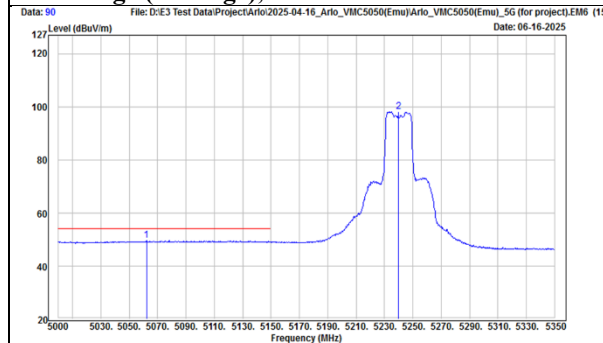
TX, 802.11n(HT20) (Ch 44)
Band Edge (Peak), Vertical



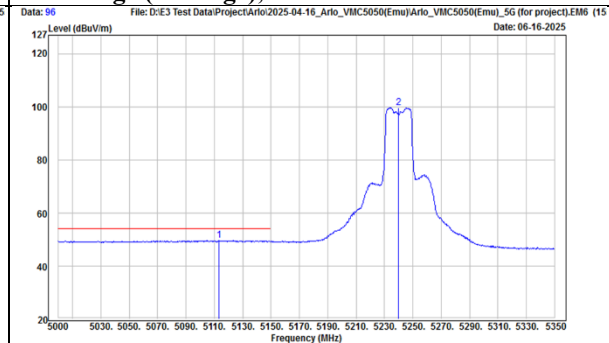
Mode	802.11n(HT20)	Channel	48
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5062.3	30.09	19.53	49.62	54	-4.38	AVG
		5148.05	41.66	19.76	61.42	74	-12.58	PK
	@	5240	88.89	19.35	108.24	N/A	N/A	PK
	@	5240	78.81	19.35	98.16	N/A	N/A	AVG
Vertical		5031.85	43.3	19.33	62.63	74	-11.37	PK
		5113.4	29.98	19.68	49.66	54	-4.34	AVG
	@	5240	88.95	19.35	108.3	N/A	N/A	PK
	@	5240	80.33	19.35	99.68	N/A	N/A	AVG

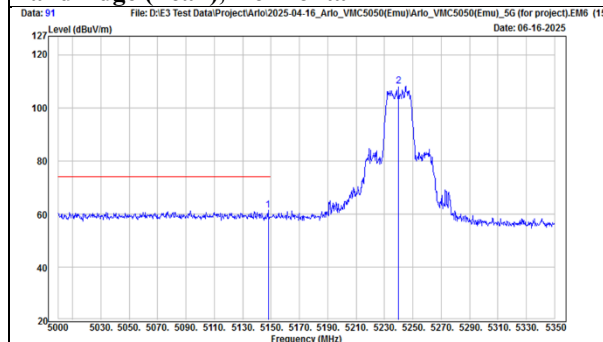
TX, 802.11n(HT20) (Ch 48)
Band Edge (Average), Horizontal



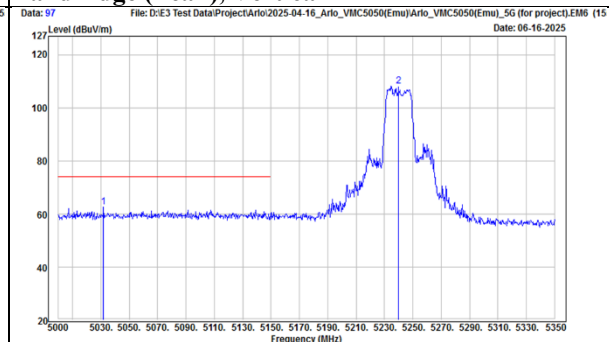
TX, 802.11n(HT20) (Ch 48)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 48)
Band Edge (Peak), Horizontal



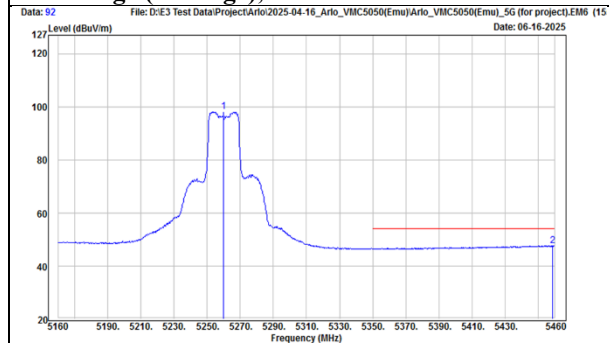
TX, 802.11n(HT20) (Ch 48)
Band Edge (Peak), Vertical



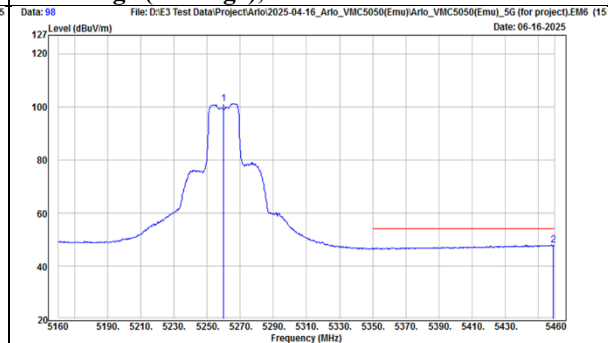
Mode	802.11n(HT20)	Channel	52
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5260	88.23	19.24	107.47	N/A	N/A	PK
	@	5260	78.86	19.24	98.1	N/A	N/A	AVG
		5456.7	39.42	19.93	59.35	74	-14.65	PK
		5458.8	27.81	19.94	47.75	54	-6.25	AVG
Vertical	@	5260	90.98	19.24	110.22	N/A	N/A	PK
	@	5260	81.95	19.24	101.19	N/A	N/A	AVG
		5454	40.68	19.92	60.6	74	-13.4	PK
		5459.4	27.95	19.95	47.9	54	-6.1	AVG

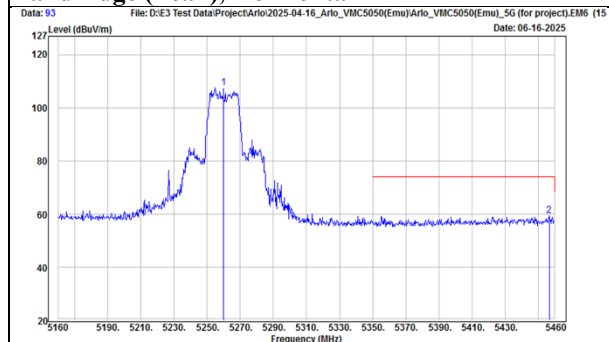
TX, 802.11n(HT20) (Ch 52)
Band Edge (Average), Horizontal



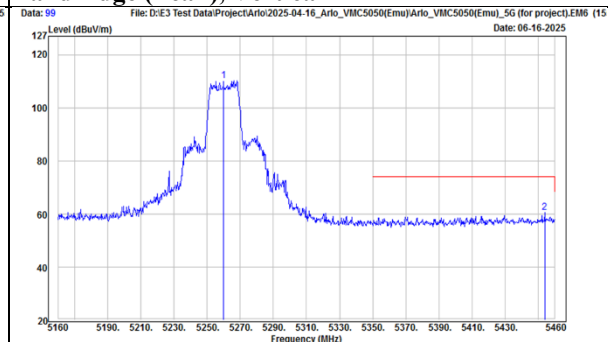
TX, 802.11n(HT20) (Ch 52)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 52)
Band Edge (Peak), Horizontal

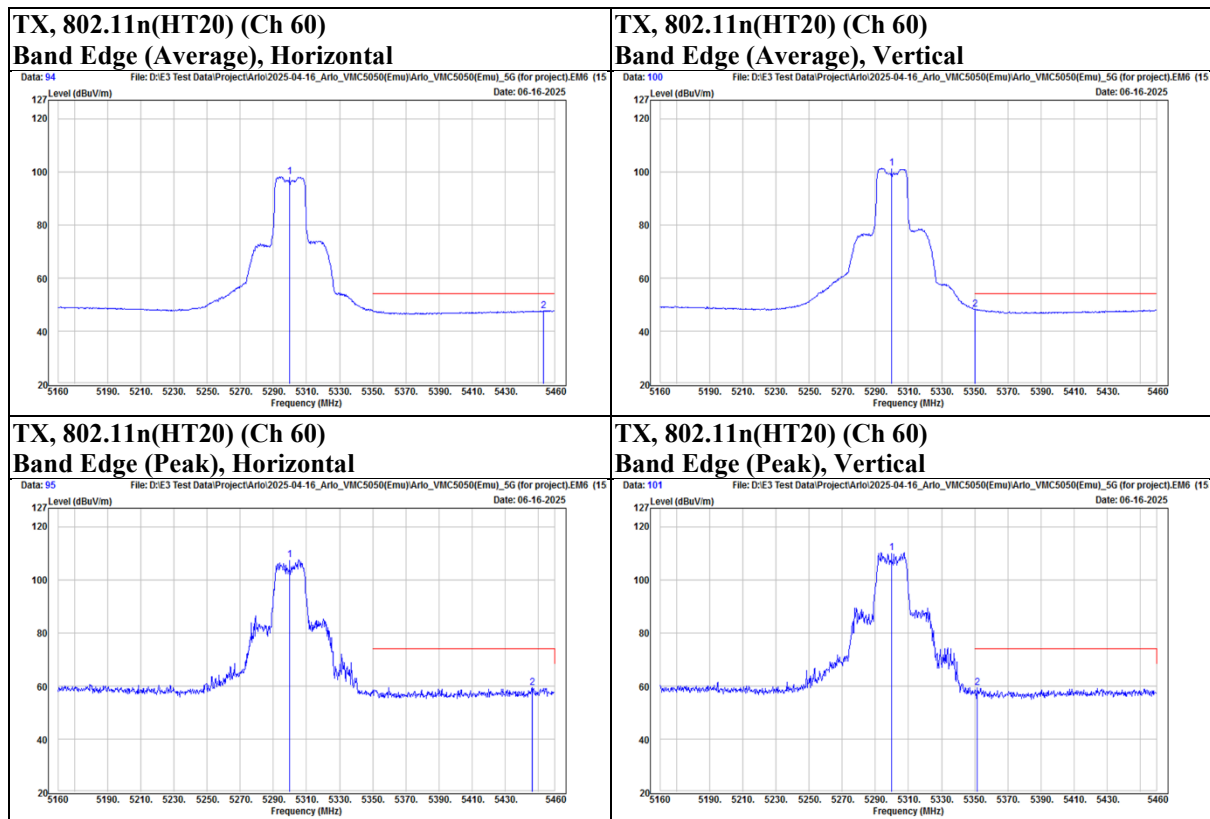


TX, 802.11n(HT20) (Ch 52)
Band Edge (Peak), Vertical



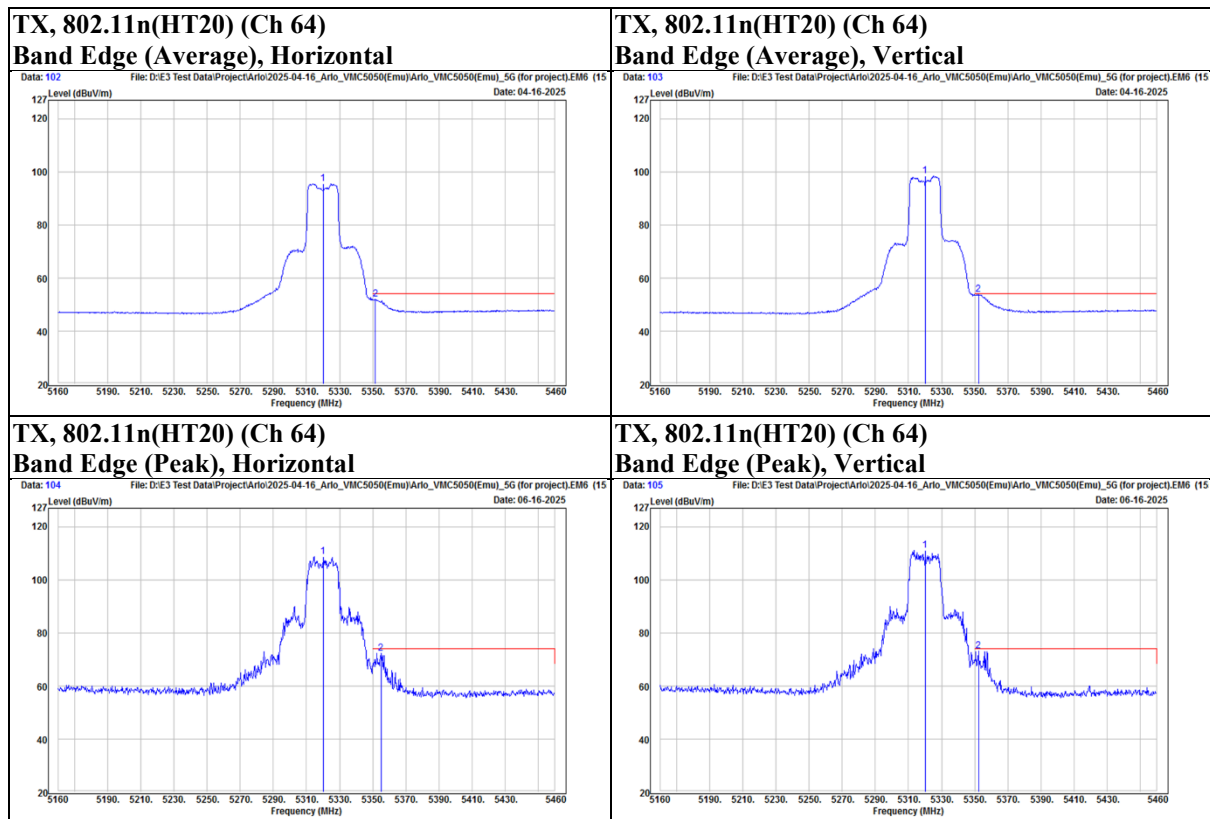
Mode	802.11n(HT20)	Channel	60
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5300	88.51	19.08	107.59	N/A	N/A	PK
	@	5300	79.05	19.08	98.13	N/A	N/A	AVG
		5446.5	39.55	19.88	59.43	74	-14.57	PK
		5453.4	27.77	19.92	47.69	54	-6.31	AVG
Vertical	@	5300	91.15	19.08	110.23	N/A	N/A	PK
	@	5300	82.29	19.08	101.37	N/A	N/A	AVG
		5350.2	28.96	19.29	48.25	54	-5.75	AVG
		5351.7	39.96	19.3	59.26	74	-14.74	PK



Mode	802.11n(HT20)	Channel	64
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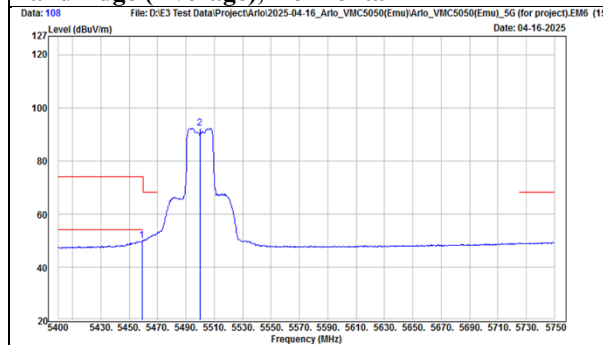
Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5320	89.46	19.17	108.63	N/A	N/A	PK
	@	5320	76.39	19.17	95.56	N/A	N/A	AVG
		5351.7	32.87	19.3	52.17	54	-1.83	AVG
		5355	52.97	19.33	72.3	74	-1.7	PK
Vertical	@	5320	91.87	19.17	111.04	N/A	N/A	PK
	@	5320	79.25	19.17	98.42	N/A	N/A	AVG
		5352.3	53.89	19.3	73.19	74	-0.81	PK
		5352.3	34.51	19.3	53.81	54	-0.19	AVG



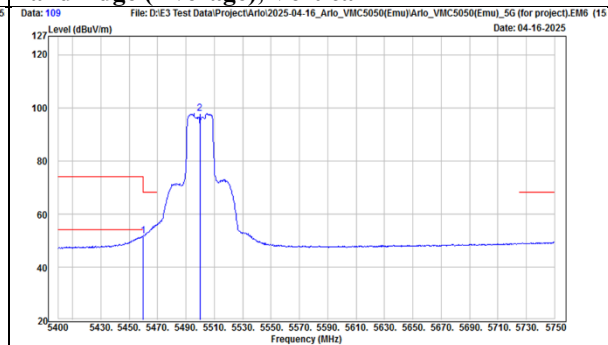
Mode	802.11n(HT20)	Channel	100
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5459.15	29.97	19.95	49.92	54	-4.08	AVG
		5459.5	42.19	19.95	62.14	74	-11.86	PK
		5464.75	46.18	19.97	66.15	68.2	-2.05	PK
	@	5500	82.48	20.13	102.61	N/A	N/A	PK
	@	5500	72.19	20.13	92.32	N/A	N/A	AVG
Vertical		5452.85	43.69	19.92	63.61	74	-10.39	PK
		5459.85	31.87	19.95	51.82	54	-2.18	AVG
		5464.75	47.59	19.97	67.56	68.2	-0.64	PK
	@	5500	85.59	20.13	105.72	N/A	N/A	PK
	@	5500	77.72	20.13	97.85	N/A	N/A	AVG

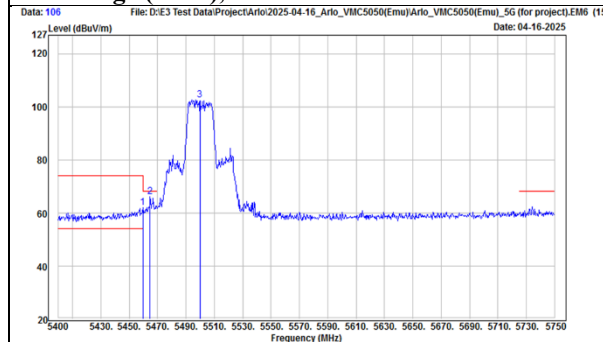
TX, 802.11n(HT20) (Ch 100)
Band Edge (Average), Horizontal



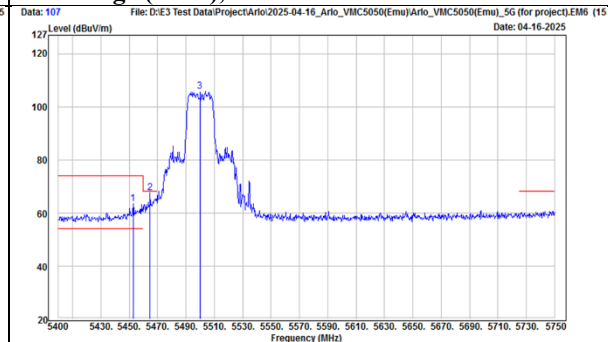
TX, 802.11n(HT20) (Ch 100)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 100)
Band Edge (Peak), Horizontal



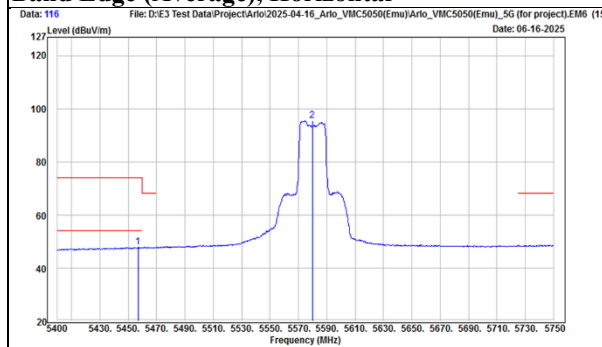
TX, 802.11n(HT20) (Ch 100)
Band Edge (Peak), Vertical



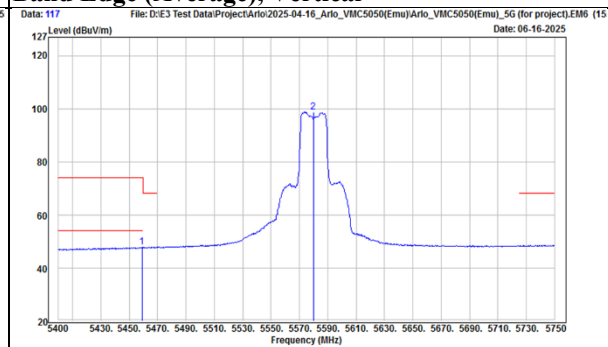
Mode	802.11n(HT20)	Channel	116
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5440.95	39.73	19.85	59.58	74	-14.42	PK
		5457.05	27.91	19.93	47.84	54	-6.16	AVG
		5464.4	38.84	19.97	58.81	68.2	-9.39	PK
	@	5580	84.62	20.08	104.7	N/A	N/A	PK
	@	5580	75.35	20.08	95.43	N/A	N/A	AVG
		5734.25	39.98	20.28	60.26	68.2	-7.94	PK
Vertical		5424.15	39.02	19.76	58.78	74	-15.22	PK
		5459.15	27.85	19.95	47.8	54	-6.2	AVG
		5465.45	38.89	19.97	58.86	68.2	-9.34	PK
	@	5580	88.29	20.08	108.37	N/A	N/A	PK
	@	5580	78.69	20.08	98.77	N/A	N/A	AVG
		5726.2	39.99	20.21	60.2	68.2	-8	PK

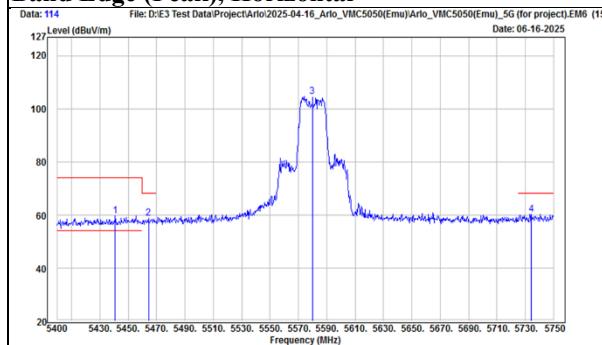
TX, 802.11n(HT20) (Ch 116)
Band Edge (Average), Horizontal



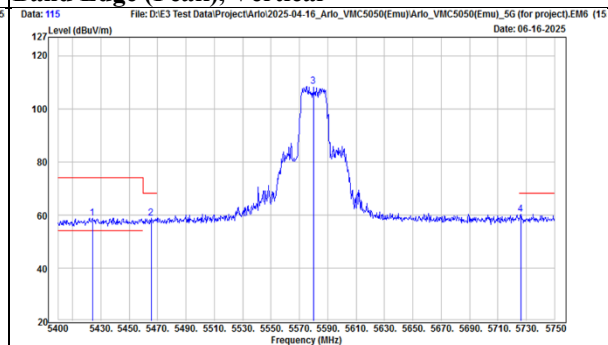
TX, 802.11n(HT20) (Ch 116)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 116)
Band Edge (Peak), Horizontal



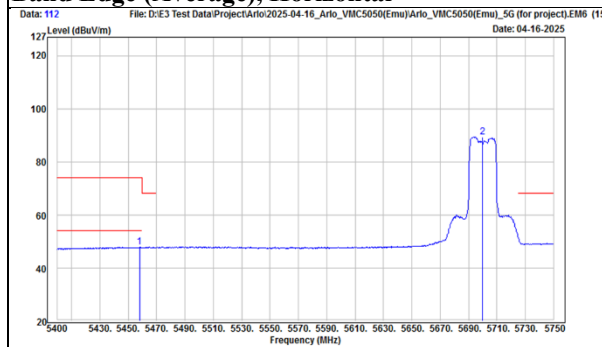
TX, 802.11n(HT20) (Ch 116)
Band Edge (Peak), Vertical



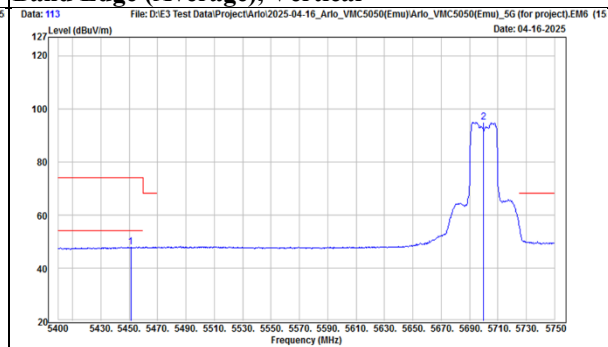
Mode	802.11n(HT20)	Channel	140
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5403.15	40.67	19.65	60.32	74	-13.68	PK
		5458.1	27.97	19.94	47.91	54	-6.09	AVG
		5470	40.41	20	60.41	68.2	-7.79	PK
	@	5700	79.09	19.96	99.05	N/A	N/A	PK
	@	5700	69.49	19.96	89.45	N/A	N/A	AVG
		5725	45.23	20.2	65.43	68.2	-2.77	PK
Vertical		5407.35	39.74	19.66	59.4	74	-14.6	PK
		5451.1	27.98	19.9	47.88	54	-6.12	AVG
		5461.25	39.06	19.95	59.01	68.2	-9.19	PK
	@	5700	84.68	19.96	104.64	N/A	N/A	PK
	@	5700	74.89	19.96	94.85	N/A	N/A	AVG
		5725	47.53	20.2	67.73	68.2	-0.47	PK

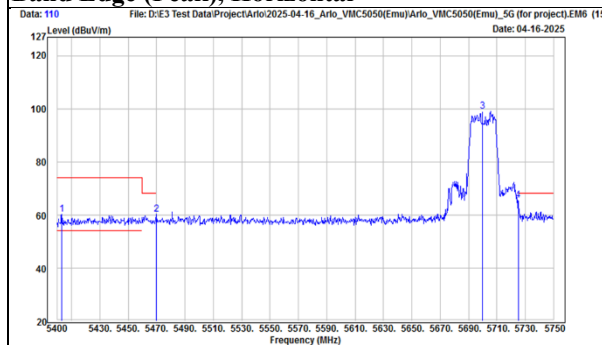
TX, 802.11n(HT20) (Ch 140)
Band Edge (Average), Horizontal



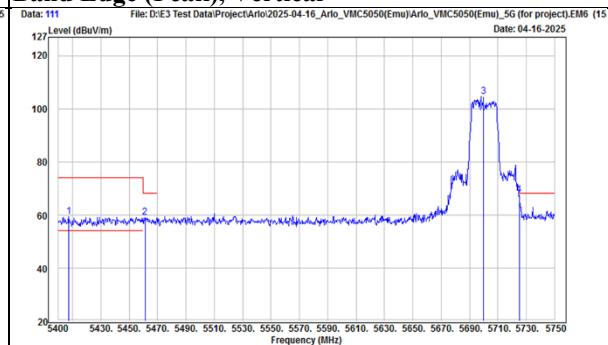
TX, 802.11n(HT20) (Ch 140)
Band Edge (Average), Vertical



TX, 802.11n(HT20) (Ch 140)
Band Edge (Peak), Horizontal

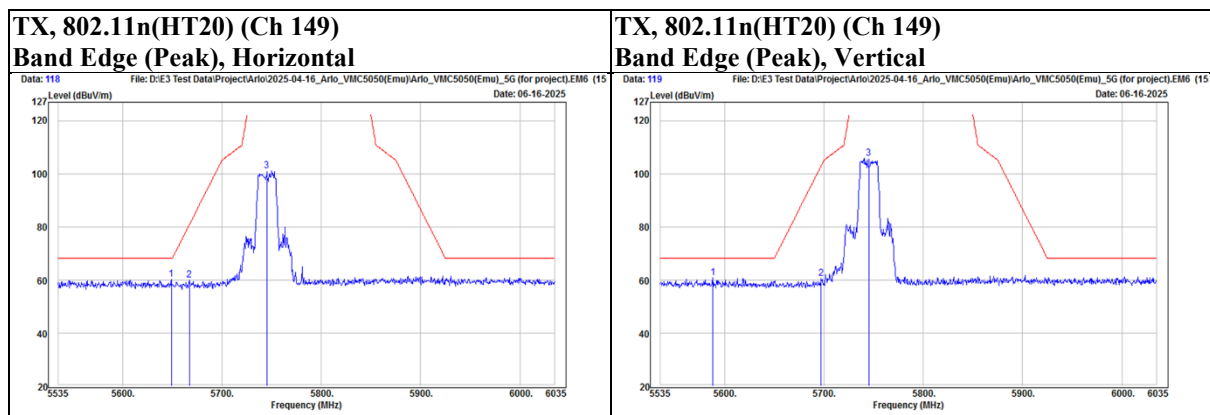


TX, 802.11n(HT20) (Ch 140)
Band Edge (Peak), Vertical



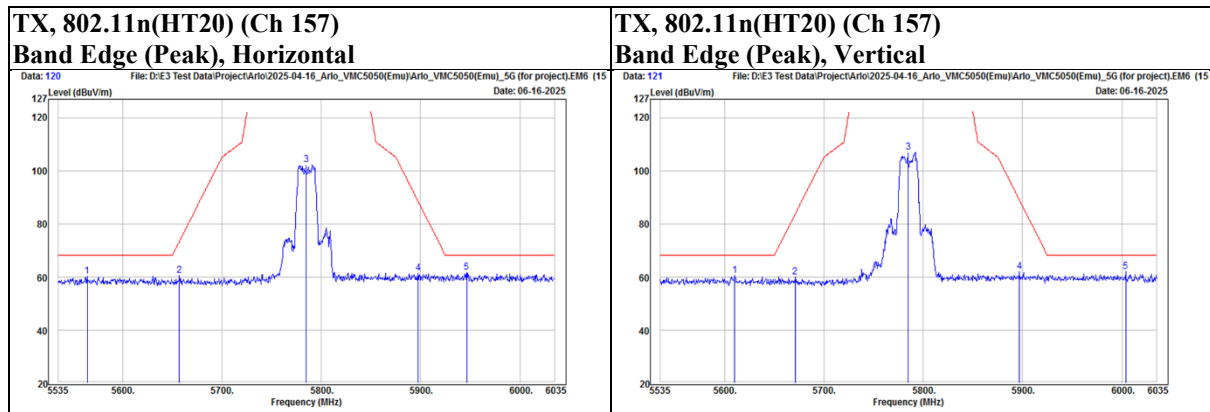
Mode	802.11n(HT20)	Channel	149
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		5649	40.22	20.04	60.26	68.2	-7.94	PK
		5667	39.95	20.01	59.96	80.82	-20.86	PK
	@	5745	80.62	20.39	101.01	N/A	N/A	PK
Vertical		5588	40.82	20.1	60.92	68.2	-7.28	PK
		5697	40.59	19.97	60.56	102.99	-42.43	PK
	@	5745	85.58	20.39	105.97	N/A	N/A	PK



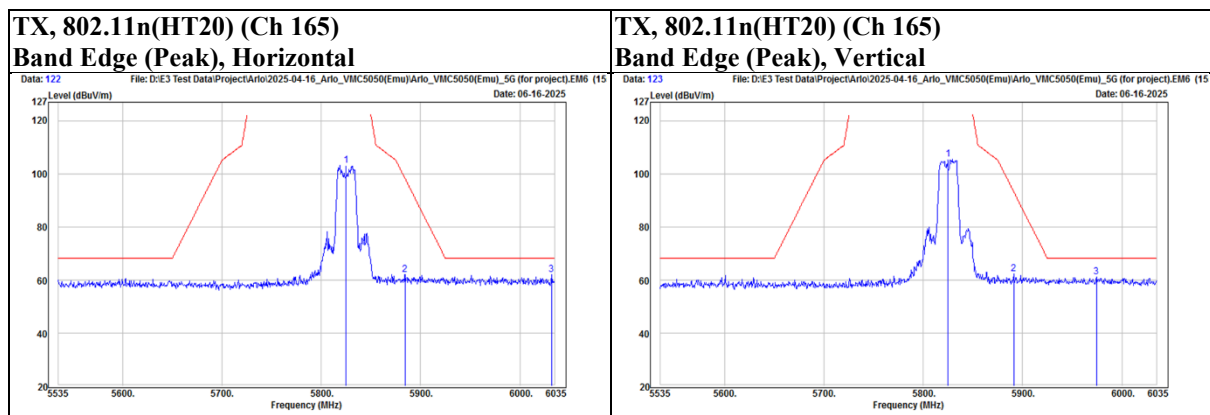
Mode	802.11n(HT20)	Channel	157
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5564	40.29	20.07	60.36	68.2	-7.84	PK
		5657	40.46	20.04	60.5	73.4	-12.9	PK
		5785	81.52	20.83	102.35	N/A	N/A	PK
		5897.5	40.14	21.27	61.41	88.51	-27.1	PK
		5946.5	40.54	21.21	61.75	68.2	-6.45	PK
Vertical	@	5610	40.46	20.1	60.56	68.2	-7.64	PK
		5671	40.01	20.01	60.02	83.78	-23.76	PK
		5785	86.09	20.83	106.92	N/A	N/A	PK
		5897	40.68	21.28	61.96	88.88	-26.92	PK
		6004	40.75	21.38	62.13	68.2	-6.07	PK



Mode	802.11n(HT20)	Channel	165
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal	@	5825	82.14	21.12	103.26	N/A	N/A	PK
		5884.5	40.73	21.26	61.99	98.15	-36.16	PK
		6032	40.51	21.41	61.92	68.2	-6.28	PK
Vertical	@	5825	84.51	21.12	105.63	N/A	N/A	PK
		5891	40.96	21.27	62.23	93.33	-31.1	PK
		5974.5	39.92	21.29	61.21	68.2	-6.99	PK



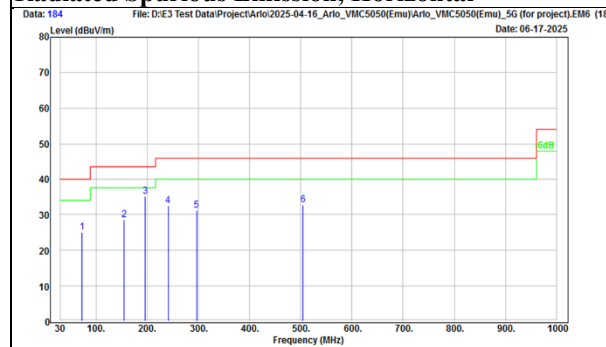
Below 1 GHz

Mode	802.11a	Channel	48
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Polarization	Notation	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
Horizontal		72.68	40	-14.89	25.11	40	-14.89	PK
		155.13	39.87	-11.27	28.6	43.5	-14.9	PK
		195.87	49.43	-14.27	35.16	43.5	-8.34	PK
		240.49	45.12	-12.5	32.62	46	-13.38	PK
		296.75	41.52	-10.35	31.17	46	-14.83	PK
		504.33	37.64	-4.85	32.79	46	-13.21	PK
Vertical		42.61	42.12	-12.24	29.88	40	-10.12	PK
		90.14	50.27	-17.78	32.49	43.5	-11.01	PK
		151.25	42.01	-11.41	30.6	43.5	-12.9	PK
		176.47	41.38	-12.53	28.85	43.5	-14.65	PK
		252.13	38.96	-12.13	26.83	46	-19.17	PK
		455.83	32.34	-5.67	26.67	46	-19.33	PK

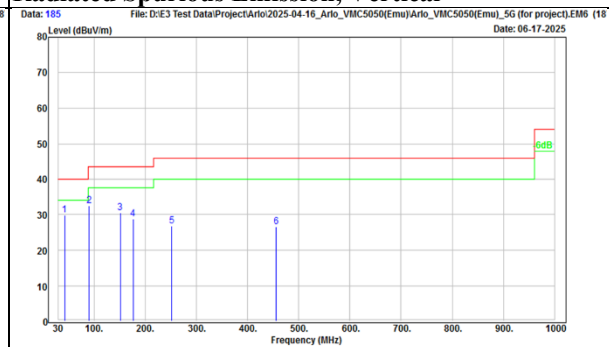
TX, 802.11a (Ch 48)

Radiated Spurious Emission, Horizontal



TX, 802.11a (Ch 48)

Radiated Spurious Emission, Vertical



Underwriters Laboratories Taiwan Co., Ltd.

Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone : +886-2-7737-3000

Facsimile (FAX) : +886-3-583-7948

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9 kHz ~ 30 MHz Data:

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

KDB 414788 D01 OATS and Chamber Correlation Justification

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

Underwriters Laboratories Taiwan Co., Ltd.

Building A, B and E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000

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9.8. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.
2. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported, the other emission levels were low against the limit.
3. Test data of Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB).
4. Test data of Margin(dB) = Result value (dBuV) - Limit value (dBuV).
5. Test data of Correction Factor (dB) = Insertion loss(dB) + Cable loss(dB).

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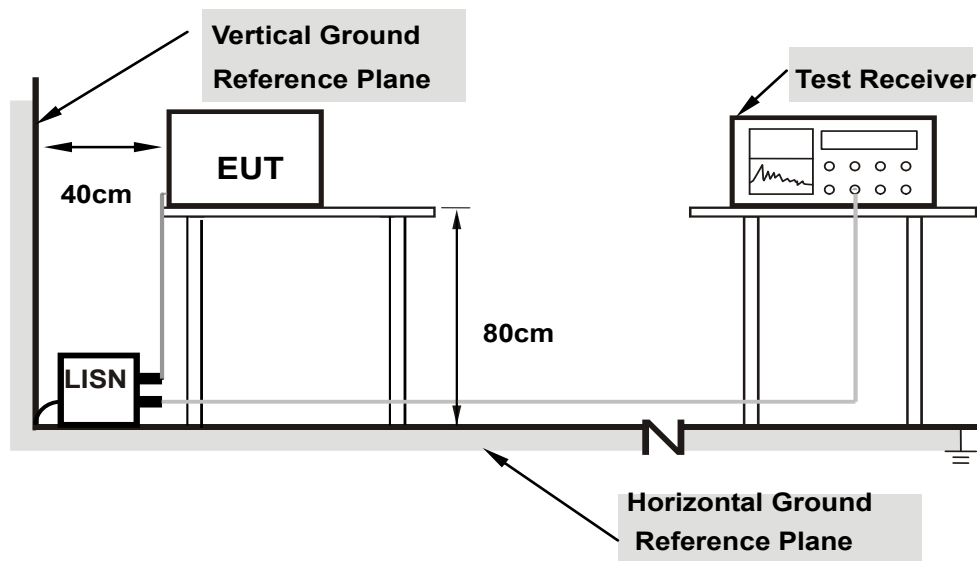
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Telephone :+886-2-7737-3000

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Test Setup

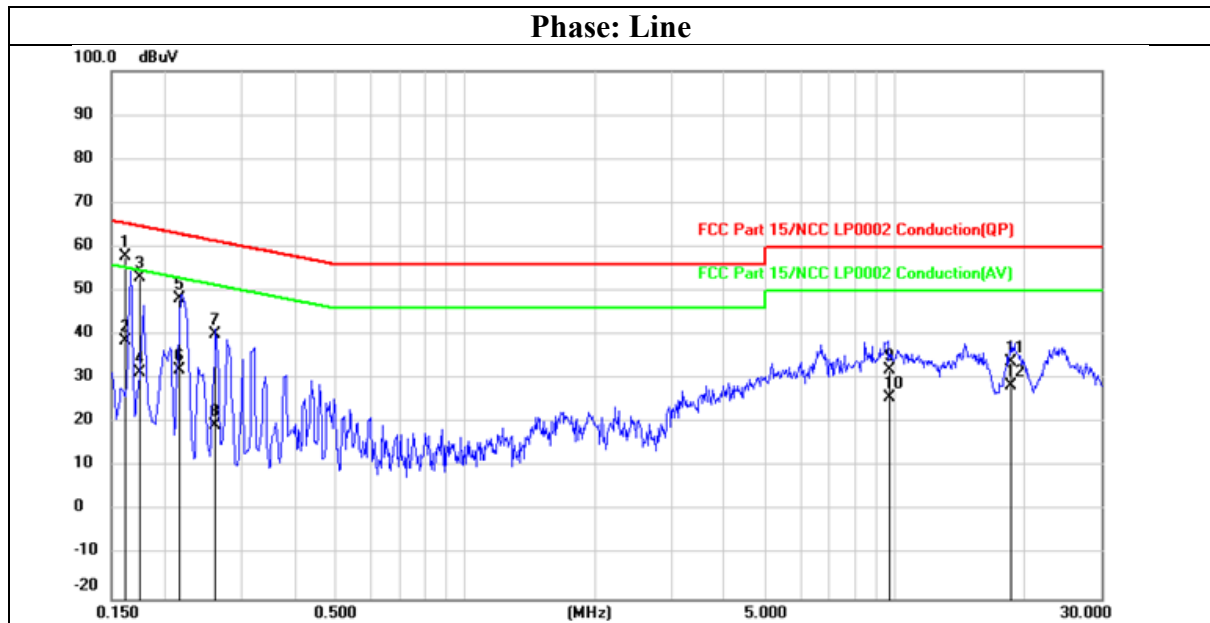


Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the Setup Configurations.

Test Data

Mode	HT20_TX5220	Channel	44
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1620	47.84	9.96	57.80	65.36	-7.56	QP
2	0.1620	28.79	9.96	38.75	55.36	-16.61	AVG
3	0.1741	43.05	9.96	53.01	64.76	-11.75	QP
4	0.1741	21.50	9.96	31.46	54.76	-23.30	AVG
5	0.2146	38.38	9.96	48.34	63.03	-14.69	QP
6	0.2146	21.96	9.96	31.92	53.03	-21.11	AVG
7	0.2614	30.25	9.97	40.22	61.39	-21.17	QP
8	0.2614	9.34	9.97	19.31	51.39	-32.08	AVG
9	9.6406	21.75	10.26	32.01	60.00	-27.99	QP
10	9.6406	15.54	10.26	25.80	50.00	-24.20	AVG
11	18.5949	23.37	10.50	33.87	60.00	-26.13	QP
12	18.5949	17.87	10.50	28.37	50.00	-21.63	AVG

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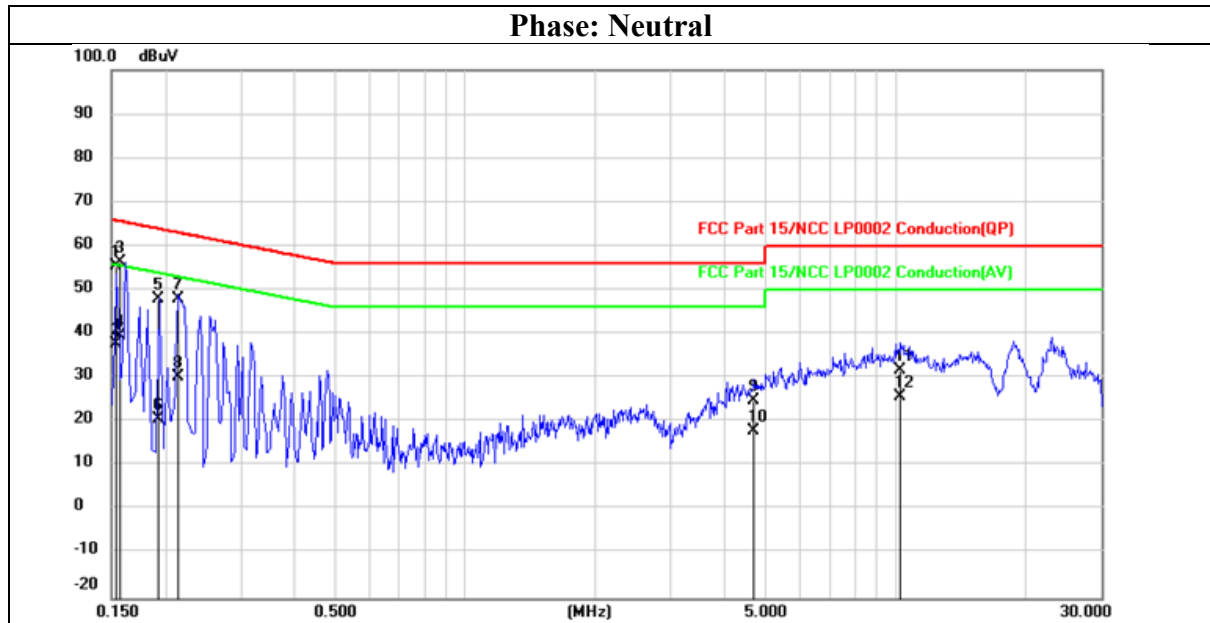
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Mode	HT20_TX5220	Channel	44
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1545	45.42	9.94	55.36	65.75	-10.39	QP
2	0.1545	27.93	9.94	37.87	55.75	-17.88	AVG
3	0.1570	46.30	9.94	56.24	65.62	-9.38	QP
4	0.1570	29.58	9.94	39.52	55.62	-16.10	AVG
5	0.1915	38.06	9.94	48.00	63.97	-15.97	QP
6	0.1915	10.67	9.94	20.61	53.97	-33.36	AVG
7	0.2135	38.13	9.94	48.07	63.07	-15.00	QP
8	0.2135	20.44	9.94	30.38	53.07	-22.69	AVG
9	4.6974	14.66	10.08	24.74	56.00	-31.26	QP
10	4.6974	7.84	10.08	17.92	46.00	-28.08	AVG
11	10.2284	21.48	10.24	31.72	60.00	-28.28	QP
12	10.2284	15.58	10.24	25.82	50.00	-24.18	AVG

END OF REPORT

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